ITI Quiz W/C- 06-May-2026 02:30 PM

Q. ID: ITISKILL65200Y

May 2026 | **Trinity, College udhyavara udupi** | Question Paper

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Score: 29/50 (58.00%)

Code: 5423

1. What is the expanded form of (a+b)²?

A) a² + 2ab + b² | B) a² - 2ab + b²
C) a² + 2ab - b² | D) (-a² - 2ab + b²) (Incorrect)

2. What is the value of (a⁵)⁷?

A) a³⁵ (Correct) | B) a1²
C) a²1 | D) a²²

3. What is the value of 5x⁴ / 5x³ ?

A) 5x | B) 5x²
C) x (Correct) | D) 5x⁴/³

4. What is the length of arc of a sector, whose radius is 15 cm and angle is 40 Degree?

A) 9.75 cm | B) 9.8 cm
C) 10.60 cm | **D) 10.4 cm (Correct)**

5. What is the area of a circular surface if the radius is 14 cm?

A) 615.44 cm² | B) 614.5 cm²
C) 612.25 cm² (Incorrect) | D) 612.44 cm²

6. What is the area of the circle if the radius is 10 cm?

A) 314 cm² | B) 31.4 cm²
C) 30.4 cm² | D) 3.14 cm² (Incorrect)

7. What is the resistance?

I = 11.5 Amps

V = 380 Volts

R = _____Ohms

A) 13 ohms | B) 23 ohms
C) 33 ohms (Correct) | D) 43 ohms

8. What is the filament resistance if a 6 volt bulb draws a current of 0.5 Amps?

A) 12 W (Correct) | B) 10 W
C) 3 W | D) 1.2 W

9. Which is equal to electric power?

A) R²I watts | **B) I²R watts (Correct)**
C) RI | D) IRA

10. Which is the example for statically induced emf?

A) Generator | B) Motor
C) Transformer (Correct) | D) Refrigerator

11. Which state of equilibrium's example is A cone resting on its tip?

A) Stable | B) Neutral
C) Unstable (Correct) | D) Horizontal

12. Which is thermosetting plastic?

A) Vinyl polymers | B) Polystyrenes
C) Celluloid | **D) Melamine resins (Correct)**

13. What is the youngs modulus if a wire of 2m long, 0.8 mm2 in cross section increases its length by 1.6 mm on suspension of 8 kg weight from it?

A) 1.25 kg/mm² | B) 12.5 kg /mm² (Incorrect)
C) 125 kg/mm² | **D) 12500 kg/mm²**

14. What is an over estimate?

A) When an estimate is exceeded to actual estimate (Correct) | B) When an estimate is fell short of the actual estimate
C) When an estimate perfectly matches the actual estimate | D) No work started as per estimate

15. Which IE rules are to be verified on completion of wiring on any new installation?

A) IE Rules, 1956 (Correct) | B) IE Rules, 1960
C) IE Rules, 1961 | D) IE Rules, 1967

16. Which affects the centre of gravity of the object

A) Weight | **B) Mass**

C) Density | D) Shape (Incorrect)

17. What is the name of the point at which all the weight of the body concentrated?

A) Initial point | **B) Centre of gravity (Correct)**
C) Centroid | D) Central point

18. What is the centre of gravity of a right circular cone from its base?

A) h/2 | B) h/3
C) h/4 (Correct) | D) h/5

19. What is the centre of gravity of a semi circle of diameter 12 cm?

A) 2.24 cm | **B) 2.54 cm (Correct)**
C) 3.25 cm | D) 2.75 cm

20. What is the value for specific heat of water

A) 4 | B) 3 (Incorrect)
C) 2 | **D) 1**

21. Which instrument is used to measure temperatures of red hot metals up to 3000 Degree C?

A) Radiation pyrometer (Correct) | B) Thermoelectric pyrometer
C) Bimetal thermometer | D) Alcohol thermometer

22. What is term used for 2 x linear expansion?

A) Co-efficient of friction | B) Co-efficient of linear expansion
C) Co-efficient of superficial expansion (Correct) | D) Co-efficient of cubical expansion

23. What is term called for 3 x linear expansion?

A) Co-efficient of friction | B) Co-efficient of linear expansion
C) Co-efficient of superficial expansion | **D) Co-efficient of cubical expansion (Correct)**

24. How much quantity of heat is required to raise the temperature of 300 grams of copper (sp.heat 0.092 cal/gram) from 25 Degree C to 75 Degree C in Kcal?

A) 138 Kcal (Incorrect) | **B) 1.38 Kcal**
C) 207 Kcal | D) 2.07 Kcal

25. Which one is a poor heat insulator?

A) Glass (Correct) | B) Cork
C) Rubber | D) Saw dust

26. What are the various stages of heat treatment?

A) Heating, Cooling and Quenching | B) Quenching, Cooling and Heating
C) Heating, Soaking and Quenching (Correct) | D) Soaking, Quenching and Cooling

27. What is colour of a metal piece when heated to 250 Degree C while doing the tempering process?

A) Blue | **B) Brown (Correct)**
C) Purple | D) Pale

28. What is the mechanical advantage, if a load of 1000 kg is lifted by a simple machine and effort applied is 250 kg?

A) 6 | B) 8
C) 3 | **D) 4 (Correct)**

29. What is the efficiency of a simple screw jack having velocity ratio is 314.2 and mechanical advantage is 220?

A) 0.6 | B) 0.65
C) 0.7 (Correct) | D) 0.75

30. What is the distance of the load from the fulcrum called?

A) Effort arm | **B) Load arm (Correct)**
C) Power arm | D) Effort

31. Which is example for first order lever?

A) A wheel barrow (Incorrect) | **B) A pair of scissors**
C) Fire tongs | D) Lime squeezer

32. Which is example for second order lever?

A) Common balance (Incorrect) | B) A pair of scissors
C) Bottle opener | D) Human forearm

33. Wha is the mass if the density of a body is 7.6 g/cm³ and its volume is 25 cm³?

A) 190 grams (Correct) | B) 200 grams
C) 210 grams | D) 220 grams

34. What is the specific gravity of the metal, if the weighs 6.5 kgf in air and 3.5 kgf in water?

A) 6.166 (Incorrect) | B) 3.166
C) 2.166 | D) 1.166

35. Which property of material enables to formation of permanent deformation without fracture?

A) Elasticity | **B) Plasticity**
C) Ductility (Incorrect) | D) Brittleness

36. What is the carbon percentage in low carbon steel?

A) 0.02% to 0.03% **B) 0.15% to 0.25%**
C) 0.25% to 0.50% (Incorrect) D) 0.50% to 1.50%

37. What is the area of a square whose side is 18 cm?

A) 26 cm² (Incorrect) B) 36 cm²
C) 72 cm² **D) 324 cm²**

38. What is the diagonal of a square plate whose side is 28 cm?

A) 39.29 cm B) 39.39 cm (Incorrect)
C) 39.49 cm **D) 39.59 cm**

39. What is the area of a sector of a circle of radius 5 cm and its angle is 96 Degree?

A) 20.39 cm² (Incorrect) **B) 20.93 cm²**
C) 20.89 cm² D) 20.98 cm²

40. What is the total surface area of a cylinder having radius 2 metres and height 5 metres?

A) 86 sq.metre (Incorrect) **B) 88 sq.metre**
C) 90 sq.metre D) 92 sq.metre

41. What is the term, if an article is purchased?

A) Selling price **B) Cost price (Correct)**
C) Margin price D) Discount price

42. How the years is denoted in simple interest calculations?

A) P (Incorrect) B) I
C) n D) r

43. How the profit / gain is expressed?

A) Rs. (Incorrect) B) $
C) % D) *

44. What is the selling price, if the profit is 5% for a computer table bought at Rs.1150/- with Rs.50/- as a transport charge?

A) 1160 B) 1620
C) 1060 (Incorrect) **D) 1260**

45. What is called if a body does not change its position with respect to its surroundings?

A) Body at motion **B) Body at rest**
C) Speed (Incorrect) D) Velocity

46. What is the equivalent unit for 1 horse power in metric system?

A) 75 kg.m/sec B) 76 kg.m/sec (Incorrect)
C) 77 kg.m/sec D) 78 kg.m/sec

47. What is the square root of 0.017?

A) 0.001 **B) 0.13 (Correct)**
C) 0.00001 D) 0.000001

48. What are fundamental units?

A) Length, Mass, Volume **B) Length, Mass, Time (Correct)**
C) Length, Mass, Area D) Length, Pressure, Volume

49. What denotes letter M in MKS system?

A) Mile **B) Meter (Correct)**
C) Millimeter D) Micron

50. Simplify: (17.49x5.2)/(6.5)

A) 13.69 B) 13.79
C) 13.89 **D) 13.99 (Correct)**